

REMARKS

The office action, including the references cited and applied therein, have been carefully considered together with the present application and amendments to the specification and drawings have been made to comply with the examiner's suggestions and to overcome the objections that have been made.

Claims 1 and 4 have been amended to overcome the claim objections and objected to claim 5 has been amended to incorporate the subject matter of claim 4 from which it depends to place claim 5 in independent form.

The examiner has noted conflicts between the reference characters described in the specification and the drawings. It is believed that the amendments to the specification and the suggested changes to Figs. 12 and 18 remove the inconsistencies and traverse the objections of the examiner. In this regard, the applicants have made the specific suggested changes to the specification and to the claims with the exception of claim 11. The examiner stated that there is insufficient antecedent basis for the term "the axis" in line 2. Applicants respectfully traverse this rejection. In claim 5, it specifically states that the outer sleeve is a hollow generally cylindrical outer sleeve. That being the case, it is an absolute geometric necessity that a cylindrical object has an axis. There is no doubt whatsoever that one of ordinary skill in the art and indeed any one that has minimal geometric technical experience would recognize that a hollow cylindrical object has an axis. Applicants respectfully ask the examiner to withdraw this objection.

The examiner has rejected claims 1-4 as being anticipated by Marinkovich, Wright, Kramer and Chen in independent rejections. As is set forth below, it is strongly believed that none of these four references anticipate, teach or suggest these claims for many reasons.

With regard to Marinkovich, it does not anticipate, teach or suggest the element of claim 1 that said apparatus is operable to maintain its unclamped position when placed in an unclamped position. It also fails to anticipate, teach or suggest the element said apparatus being released when the at least one shoulder of the blade shank portion engages said apparatus as the shank portion is inserted into said opening in a slot a

predetermined distance to thereby place said apparatus in said clamped position. Finally, it does not anticipate, teach or suggest said apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly when said apparatus is moved to said unclamped position.

The examiner has either not studied Marinkovich closely enough to understand how it operates or has incorrectly characterized its operation. As is evident, Fig. 3 clearly illustrates that the only spring action that occurs is from the torsion spring 34 which biases the clamp mechanism toward its closed position. Moreover, as described in the summary of the invention at column 2, lines 1-12, it is clear that the locking member is in a locked position and the method of using the mechanism requires the user to move the actuating member to a disengaged position, contacting the actuating member with the locking member during the moving step to thereby force the locking member to move to an unlocked position, inserting the saw blade into the spindle, returning the actuating member back to the engaged position, and forcing the actuating member to contact and move the locking member into the locked position and into engagement with the saw blade.

If this is inconclusive, column 4, lines 42-45 states that in operation before a saw blade is inserted, *the rear and front cam members 38, 40 are normally in the engaged position due to the biasing action of the spring 34*. Thus, Marinkovich clearly does not teach or suggest the element that said apparatus is operable to maintain its unclamped position when placed in said unclamped position. Moreover, column 4, lines 57-60 states that the saw blade 24 is released by rotating the rear and front cam member 38, 40 against the biasing force of the spring 34. This forces the pin 30 to move out of the slot 52, thereby allowing the *saw blade 24 to be pulled from the slot 52*. Since it must be pulled from the slot and because it has no spring action bearing upon the tang portion of the blade to *push* the blade portion outwardly, it certainly fails to anticipate, teach or suggest the last element of the claim which states said apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly when said apparatus is moved to said unclamped position.

The examiner also rejects claim 1 as being anticipated by Wright '457 (hereinafter "Wright"). An analysis of the operation of Wright reveals that it also does not anticipate, teach or suggest claim 1. Wright fails to teach or suggest the final element of the claim, namely said apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly when said apparatus is moved to said unclamped position. The examiner indicates that Wright discloses the apparatus being released when the at least one shoulder of the blade shank portion (Fig. 8) engages the apparatus as the shank portion is inserted into the opening in the slot a predetermined distance to place the apparatus in the clamped position (col. 8, lines 30-40) and the apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly when moved in the unclamped position.

Applicants dispute the correctness of the examiner's characterization of the operation of Wright. Applicants believe that none of the text of Wright disclose, teach or suggest that Wright pushes the blade shank portion outwardly when the apparatus is moved to its unclamped position. The examiner contends that column 8, lines 30-40 does so, but it is clear that it does not. The text of lines 30-40 merely indicate that there is a force for pushing the saw blade toward the sternal saw and that it thereby provides a "*self-centering feature*" provided by the inclined edges 64 of the saw blade 48 and inclined surfaces 88 of the chuck 66 of the embodiment of Figs. 1-6 may also be provided in the embodiment of Figs. 7-8" which is a feature for holding or locking the blade in place and has nothing to do with its release. There is no discussion whatsoever that the blade is *pushed* outwardly when the apparatus is moved to an unclamped position. Even Fig. 6, which shows the Wright apparatus in its locked position, indicates the shoulder 63 (which is comparable to the shoulder in the claim) is not in contact with any part of the apparatus and therefore there is no engaging of the at least one shoulder and pushing the blade shank portion outwardly. Wright therefore simply fails to anticipate, teach or suggest applicants' invention as defined in claim 1.

Kramer '548 (hereinafter "Kramer") similarly fails to anticipate, teach or suggest claim 1. The examiner also mischaracterizes the operation of this reference when

he states that Kramer shows the apparatus being released when the at least one shoulder of the shank portion engages its apparatus as the shank portion is inserted into the opening in the slot a predetermined distance to place the apparatus in the clamped position and the apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly when moved in the unclamped position, citing column 5, line 54-column 6, line 8.

Kramer clearly does not operate in this manner. First of all, claim 1 includes the recitation said apparatus being operable to maintain its unclamped position when placed in said unclamped position. Kramer does not do so as is established at column 5, line 54-61 where it states that in operation before a saw blade is inserted the cam collar 56 is normally in the engaged position due to the biasing action of the spring 54. To insert a saw blade 42, the collar housing 59 is engaged by the user and rotated to the released position thereby allowing the pin 50 to move out of the slot 62. The tang 48 of the saw blade is then inserted into the slot until the shoulder portions of the saw blade contacts the sleeve 58. A review of the structure of the Kramer mechanism clearly indicates that there is no detent position and that would enable the apparatus to maintain its unclamped position and it does not operate in that manner. It also fails to anticipate, teach or suggest the element said apparatus being released when the at least one shoulder of the blade shank portion engages said apparatus as the shank portion is inserted into said opening in a slot a predetermined distance to thereby place said apparatus in said clamped position.

Moreover, Kramer fails to anticipate, teach or suggest the final paragraph of the claim wherein said apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly when said apparatus is moved to said unclamped position. This is simply not done as is established by column 6, line 5-8 where it states the saw blade 42 is released by rotating the cam collar 56 against the biasing force of the spring 54. This allows the pin 50 to move out of the slot 62 thereby allowing the saw blade *to be pulled from the slot 62*. This stated operation is clear and unequivocal and is different from what is claimed by applicants.

The examiner has also rejected claims 1-4 as being anticipated by Chen. Chen similarly fails to anticipate, teach or suggest the apparatus of claim 1 for similar reasons. Chen does not teach or suggest apparatus being operable to maintain its unclamped position when placed in said unclamped position because it has a torsion spring 60 that always rotates the sleeve toward a locked position. There is no detent that would hold the sleeve in an unlocked position and it simply does not operate in the manner to satisfy this element of the claim. This is described at column 3, lines 20-37. It also fails to anticipate, teach or suggest the element said apparatus being released when the at least one shoulder of the blade shank portion engages said apparatus as the shank portion is inserted into said opening in a slot a predetermined distance to thereby place said apparatus in said clamped position.

Additionally, Chen fails to anticipate, teach or suggest the element said apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly when said apparatus is moved to said unclamped position. This is confirmed at column 3, lines 25-34 which states in part “where the positioning ball 50 is rested on the second urging portion 322 of the urging face 32 and the slide 30 and is detached from the positioning hole 82 of the blade 80. Thus, the blade 80 can be detached from the support seat 12 of the main body as shown in Fig. 5.” Clearly, the Chen apparatus does not engage the at least one shoulder and pushing the blade shank portion outwardly when said apparatus is moved to said unclamped position. As is clearly indicated in Figs. 2, 4 and 5, the shank portion merely fits in the slot and the only engagement is the ball 50 when it is placed in its locked position. The examiner’s characterization of the apparatus satisfying this element of the claim is simply wrong.

Claim 4 is also neither anticipated, taught nor suggested by any of the four references because it also has the element “a release retaining mechanism for holding said apparatus in its unclamped position when placed in said unclamped position” and “said clamping apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly therefrom when said retaining mechanism is moved to said unclamped position”. Therefore, the arguments that were made with regard to each of these

references apply equally to claim 4.

Since the dependent claims 2 and 3 necessarily include the subject matter of claim 1 and in addition recite other features and/or functionality, these claims are also believed to be allowable.

Reconsideration and allowance of all claims is respectfully requested.

Respectfully submitted,

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